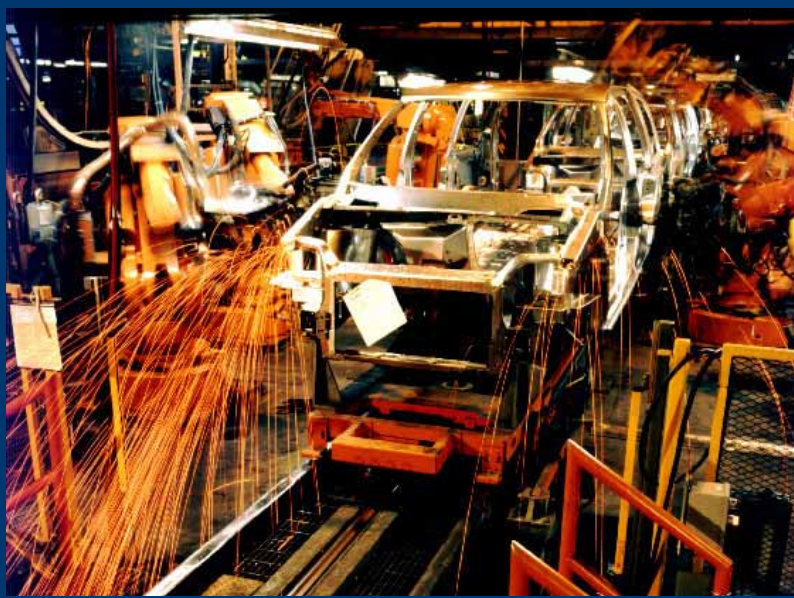


SI SYSTEMS CARTRAC®

SPINNING TUBE CONVEYOR



Key Benefits: Reliability, Precision, Non-synchronous Conveying

SI Systems Spinning Tube Conveyor technology is your best material handling solution whether you are assembling axles or transferring underbody sub-assemblies.

A spinning tube, mounted between track rails, provides carrier propulsion. One or more drive wheels are mounted underneath the carrier, connected by a pivotable linkage, and maintain contact with the constantly spinning tube. Drive wheels are spring-loaded to pivot 45 degrees, at which point a full speed of up to 300 FPM can be obtained.

Cams and control bars change the pivot angle at which the drive wheel(s) contacts the drive tube, such that at 0 degrees of pivot, the car remains at rest. As the drive wheel angle changes, forward thrust can be imparted or impaired, and the carrier either moves forward achieving controlled acceleration, or stops with controlled deceleration.

This equipment can be floor or ceiling mounted. Systems have been installed for applications as clean as computer assembly . . . environments as hostile as foundry operations. Carriers are controlled independently, thereby providing accumulation when necessary, and accommodating non-synchronous operations.

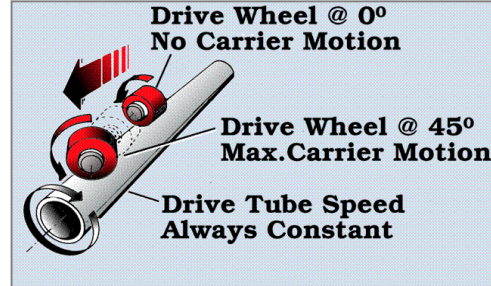
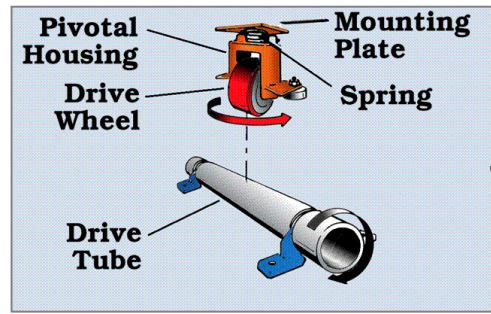
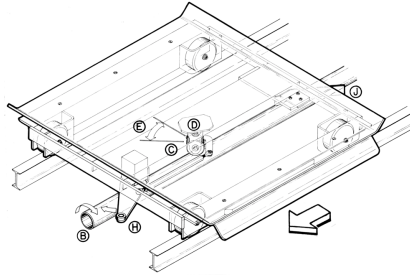
CARTRAC (5,000 lbs. max. load) has been successfully used to manufacture everything from cars and trucks to appliances and munitions. The CARTRAC family also includes ROBOLITE® (500 lbs. max. load), developed specifically for light assembly operations such as automotive axles and engine blocks, and ROBODRIVE® (30,000 lbs. max. load), typically used for straight line transfer of very heavy products.

Technical Specifications

Load Capacity	250 lbs. to 30,000 lbs.
High Speed Indexing	4.2 ft. per second station-to-station
Carrier Positioning	± .060" standard / ±.005" optional
Modular Components	Track, transfers, turns, lifts, turntables, drawbridges

SI Systems CARTRAC[®], Spinning Tube Conveyor

Carriers can be provided offering accumulation capabilities. An integrated mechanical linkage cams the drive wheels to zero when the carrier comes in contact with another carrier already positioned at a stop.



Feature	Benefit
High speed indexing	Increased throughput
Non-synchronous carrier movement	Flexibility of system
Smooth acceleration / deceleration	Product stability
Accurate stopping repeatability	Ability to interface with automated operations
Modular design	Flexible system routing using turntables, transfers, radius turns and lifts
Zero pressure accumulation	Eliminate product damage
High reliability	Low maintenance, 99.9% up time
Suitable for harsh environments	Trouble-free operation

Core Technologies

SI Systems is an ISO 9001 certified Systems Integrator and the world leader in design, manufacture and installation of horizontal transportation and automated order fulfillment solutions. Our diverse capabilities and experience are supported by our core technologies which consist of LO-TOW[®] in-floor towline systems used in manufacturing, assembly and distribution environments; CARTRAC[®] high-speed, precision accumulation and transport systems utilizing spinning tube technology; and DISPEN-SI-MATIC[™] which provides high-speed automated order picking and fulfillment for less-than-full-case orders.



Regional sales offices and business partners located throughout the United States

The Performance and Throughput Experts



SI Systems
Main Office
600 Kuebler Road
Easton, PA 18040-9295 U.S.A.

Phone: 610-252-7321
Fax: 610-250-9677
E-mail: info@sihs.com
Web site: www.sihs.com